Complete Summary

GUIDELINE TITLE

Acute uterine bleeding unrelated to pregnancy.

BIBLIOGRAPHIC SOURCE(S)

Kaiser Permanente Southern California. Acute uterine bleeding unrelated to pregnancy. Pasadena (CA): Kaiser Permanente Southern California; 2006 Aug. 27 p. [70 references]

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Acute abnormal uterine bleeding (AUB) unrelated to pregnancy

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Emergency Medicine
Family Practice

Internal Medicine
Obstetrics and Gynecology
Pediatrics

INTENDED USERS

Emergency Medical Technicians/Paramedics
Physicians

GUIDELINE OBJECTIVE(S)

To provide clinical guidelines for the investigation and management of acute abnormal uterine bleeding (AUB) based upon the best available evidence

TARGET POPULATION

Women and adolescent girls with acute abnormal uterine bleeding (AUB)

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation

1. Medical history, including family history
2. Physical exam, including bimanual examination of the pelvis
3. Laboratory investigations, including a complete blood count, urinary (or serum) assay to rule out pregnancy, and other tests, as indicated
4. Uterine assessment including:
    - Histological assessment with endometrial biopsy
    - Ultrasonographic techniques (transvaginal ultrasound and saline infusion sonography [SIS])
    - Hysteroscopy
    - Myometrial evaluation, if indicated

Management/Treatment

1. Stabilization (blood transfusion) if needed
2. Medical management
    - Intravenous conjugated equine estrogens
    - Combination oral contraceptives
    - Progestin-only preparation
    - Antifibrinolytics
    - Gonadotropin-releasing hormone (GnRH) agonists
3. Procedural management
    - Intracavitory tamponade with Foley catheters
    - Dilation and Curettage (D&C) with hysteroscopy
    - Endometrial ablation
    - Uterine artery occlusion/embolization
    - Hysterectomy
4. Reevaluation for causes of bleeding and appropriate preventive management

MAJOR OUTCOMES CONSIDERED

- Accuracy and sensitivity of diagnostic tests
- Efficacy of medical and surgical treatment
- Incidence of disorders of hemostasis in women with acute uterine bleeding

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Literature searches were performed in MEDLINE and MEDLINE Randomized Trials (1966 to December 2004) and the Cochrane Database of Systematic Reviews and the Cochrane Controlled Trials Registry (2004 Issue 4). Combination(s) of the following terms were used: "uterine," "acute," "menorrhagia," "treatment," "management," "heavy," von Willebrand's. Also searched were the Web sites of the American College of Obstetricians and Gynecologists, the Society of Obstetricians and Gynecologists of Canada, the New Zealand Guidelines Group, the Royal College of Obstetricians and Gynecologists, and the Geneva Foundation for Medical Education and Research, (http://www.gfmer.ch/000_Homepage_En.htm) each a repository of web-published guidelines. The date of the last search of these sources was December 31, 2004.

NUMBER OF SOURCE DOCUMENTS

One randomized clinical trial (RCT) evaluating acute abnormal uterine bleeding and 6 additional relevant publications were identified.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Hierarchy of Evidence*

1. Randomized controlled trials
2. Non-randomized, but internally controlled trials. Controls are considered to be "internal" if they are included in the original design of the study. Post hoc or historical comparisons are not considered internal controls. Comparisons of otherwise uncontrolled clinical series are not considered internal controls
3. Case control studies
4. Cohort studies
5. Clinical series, without internal comparison
6. Expert opinion, without available clinical studies**

*Kaiser Permanente National Guideline Directors Group, Edition 3, September 1, 2004

**Level of evidence added by the Abnormal Uterine Bleeding Work Group (AUBWG).

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Evidence was originally classified using a system developed by the Kaiser Permanente National Guideline Directors Group (GDG). The Abnormal Uterine Bleeding Work Group (AUBWG) added a "Class 6" to allow for the inclusion of evidence generated from expert opinion including that from guidelines or other consensus documents from national or international organizations or from the collective opinion of the members of the AUBWG itself. The recommendations were created and classified according to the strength of the evidence system developed by the GDG.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The guideline was developed using the best available evidence and, where such evidence was insufficient or absent, a consensus process.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Support for Recommendations*

Recommendation: A

Language: The Guideline Development Team (GDT) strongly recommends that clinicians routinely provide the intervention to eligible patients.

Evidence: The intervention improves important health outcomes, based on good evidence, and the GDT concludes that benefits substantially outweigh harms and costs.

Recommendation: B

Language: The GDT recommends that clinicians routinely provide the intervention to eligible patients.

Evidence: The intervention improves important health outcomes, based on 1) good evidence that benefits outweigh harms and costs; or 2) fair evidence that benefits substantially outweigh harms and costs.

Recommendation: C

Language: The GDT makes no recommendation for or against routine provision of the intervention. At the discretion of the GDT, the recommendation may use the language "option," but must list all the equivalent options.

Evidence: Evidence is sufficient to determine the benefits, harms, and costs of an intervention, and there is at least fair evidence that the intervention improves important health outcomes. But the GDT concludes that the balance of the benefits, harms, and costs is too close to justify a general recommendation.

Recommendation: D

Language: The GDT recommends against routinely providing the intervention to eligible patients.

Evidence: The GDT found at least fair evidence that the intervention is ineffective, or that harms or costs outweigh benefits.

Recommendation: I

Language: The GDT concludes that the evidence is insufficient to recommend for or against routinely providing the intervention. At the discretion of the GDT, the recommendation may use the language "option," but must list all the equivalent options.

Evidence: Evidence that the intervention is effective is lacking, of poor quality, or conflicting and the balance of benefits, harms, and costs cannot be determined.

*Kaiser Permanente National Guideline Directors Group, Edition 3, September 1, 2004

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Not stated

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not applicable

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Hierarchy (classes) of evidence (1– 6) and support for recommendation (A –D and I) definitions are given at the end of the "Major Recommendations" field.

Summary of Recommendations

Recommendations are evidence based (E) unless sufficient evidence is not available where consensus-based recommendations are provided (C).

	Method*	Strength**	Recommendation
1	C	N/A	It is important to exclude pregnancy in all patients with acute abnormal uterine bleeding (AUB) in the reproductive years.
2	E	A	Perimenarcheal patients with acute AUB may be at increased risk for an inherited coagulopathy and should be screened accordingly with a structured history. (See Appendix III in the original guideline document).
3	C	N/A	Hemodynamically stable patients may be offered either oral multidose progestins, or oral multidose, monophasic, combination oral contraceptives. (See Appendix IV in the original guideline document).
4	E	C	There is fair evidence supporting the efficacy of intravenous conjugated equine estrogens for hemodynamically-stable patients.
5	C	N/A	Dilation and curettage (D&C) should be reserved for patients who, in the opinion of the clinician, are inappropriate for, unresponsive to, or contraindicated from the use of medical therapy.
6	E	A	When performed, D&C should be accompanied by hysteroscopy.
7	C	N/A	Parenteral antifibrinolytic agents such as epsilon aminocaproic acid may have a role in the management of patients with recalcitrant acute AUB who otherwise would be candidates for more invasive surgical procedures including those that remove fertility, such as hysterectomy.
8	C	N/A	Patients with acute uterine bleeding may be offered surgical alternatives to D&C that may preserve fertility including intrauterine Foley balloon and uterine artery occlusion/embolization.
9	C	N/A	In some instances it will be necessary to offer patients options that will remove future fertility by removing or destroying the endometrium. These include endometrial ablation and hysterectomy.
10	E	A	Many patients with acute uterine bleeding have an underlying chronic disorder that requires systematic evaluation and, in many instances, chronic therapy, following the arrest of the acute phase of the process.

*E = Evidence-based; C = Consensus-based

**See Definitions below; Strength of evidence is not applicable (N/A) to consensus-based recommendations.

Definitions:

Hierarchy of Evidence*

1. Randomized controlled trials
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Support for Recommendations*

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*Kaiser Permanente National Guideline Directors Group, Edition 3, September 1, 2004

**Level of evidence added by the Abnormal Uterine Bleeding Work Group (AUBWG).

CLINICAL ALGORITHM(S)

A clinical algorithm is provided in the original guideline document for acute uterine bleeding.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate evaluation and management of acute abnormal uterine bleeding (AUB)

POTENTIAL HARMS

- Estradiol "flare" that follows induction of *gonadotropin-releasing hormone (GnRH) agonists* lasts from about day 5 to day 14 and it is often accompanied by uterine bleeding, which may be heavy. Consequently, if GnRH agonists are used, they should be accompanied by three weeks of medroxyprogesterone acetate (MPA) or a combination oral contraceptive daily for the same period of time.
- Estrogen-containing products should be used with caution in women with previous breast cancer as well as in those with increased risk of arterial thromboembolic disease including heavy smokers over the age of 35 and those with previous thrombotic stroke.
- Nineteen carbon atom (C-19) progestins, such as norethindrone and norethindrone acetate may undergo conversion to ethinyl estradiol both in the liver and peripherally. C-19 progestins should be used with caution in women in whom exogenous estrogens are contraindicated.

QUALIFYING STATEMENTS

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The recommendations in this guideline are for information purposes only. They are not intended or designed as a substitute for the reasonable exercise of independent clinical judgment by practitioners, considering each patient's needs on an individual basis. Guideline recommendations apply to populations of patients. Clinical judgment is necessary to design treatment plans for individual patients.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Clinical Algorithm

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Kaiser Permanente Southern California. Acute uterine bleeding unrelated to pregnancy. Pasadena (CA): Kaiser Permanente Southern California; 2006 Aug. 27 p. [70 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2006 Aug

GUIDELINE DEVELOPER(S)

Kaiser Permanente-Southern California - Managed Care Organization

SOURCE(S) OF FUNDING

Kaiser Permanente Southern California

GUIDELINE COMMITTEE

Southern California Permanente Medical Group, Abnormal Uterine Bleeding Working Group

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available from Marguerite Koster, Practice Leader, Technology Assessment and Guidelines Unit, Kaiser Permanente Southern California; Email: Marguerite.A.Koster@kp.org

Print copies: Available from Malcolm G. Munro, MD, FRCS(c), FACOG, Department of Obstetrics and Gynecology, Kaiser Permanente Southern California, Professor, Department of Obstetrics & Gynecology, David Geffen School of Medicine at UCLA; Email: M.G.Munro@kp.org

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on September, 20, 2006. The information was verified by the guideline developer on December 6, 2006.

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